

Reza Mahjourian

EDUCATION

UNIV. OF TEXAS AT AUSTIN

PHD IN COMPUTER SCIENCE

2018 | GPA: 4.0

SHARIF UNIV. OF TECH.

BS IN COMPUTER ENG.

Tehran, Iran

SKILLS

A.I. RESEARCH

Robotics • Foundation Models •

Computer Vision • Reinforcement

Learning • Evolutionary Strategies

OPEN SOURCE

❖ Organized [Waymo Open Dataset](#)

Occupancy and Flow Prediction

Challenges at [CVPR 2022](#), [CVPR 2024](#),

and Scenario Generation Challenge at

[CVPR 2025](#)

❖ [GameGraph](#) : Studies impact of domain stochasticity and ergodicity on Reinforcement Learning, 2011.

❖ [Discovery](#) : Evolutionary feature discovery for Reinforcement Learning, 2011.

❖ [OpenNERO](#) : Platform for A.I. research and education, 2014.

EXPERIENCE

WAYMO RESEARCH | STAFF RESEARCH SCIENTIST

Jul 2019 - present | Mountain View, CA

- Led cross-functional collaborations with the Perception and Simulation teams landing models from the Research team in production.
- Fine-tuned Gemini models on a diverse set of tasks including detection and segmentation. Consistently improved metrics (e.g. 5-34% long-tail object categories, 10-16% long-tail segmentation) over the baseline finetuning recipe.
- Visual trajectory prediction with VLMs [ECCV 2024](#).
- Collaborated with DeepMind Robotics on high-speed robotics learning [RSS 2023](#), achieving human-level competitive robot table tennis [ICRA 2025](#), [Videos](#) using hierarchical and modular policies [PhD Dissertation](#).
- Tech lead for scalable occupancy and trajectory prediction: StopNet [ICRA 2022](#), patent, Occupancy Flow Fields [RA-L 2022](#), patent, Modeling multi-agent interactions [ICRA 2021](#), patent, used in [Waymo Open Motion Dataset](#), Multi-agent scenario generation [ICRA 2024](#), and BEV modeling for 3D Perception [WACV 2024](#).
- Trained instance segmentation models with contrastive learning [IROS 2022](#) patent, and efficient semantic segmentation models. [ArXiv 2022](#).

GOOGLE BRAIN ROBOTICS | STUDENT RESEARCHER

Sep 2017 - Nov 2018 | Mountain View, CA

- Sample-efficient reinforcement learning of robot table tennis with self-play in a VR environment. [ArXiv 2018](#), [Website](#). The hierarchical and modular policy design was adopted in a multi-year project leading to achieving human-level competitive robot table tennis [ICRA 2025](#), [Videos](#).
- Unsupervised learning of object depth and motion from raw monocular videos. [AAAI 2019](#), [CVPR 2019](#), patent, [Website](#), [Google AI Blog](#).
- Future semantic segmentation using 3D structure, [ECCV 2018](#), patent.
- Added computer vision library functions to [TensorFlow](#).

GOOGLE BRAIN ROBOTICS | RESEARCH INTERN

May 2017 - Aug 2017 | Mountain View, CA

- Developed a novel self-supervised learning method for depth and ego-motion from monocular videos. [CVPR 2018](#), [Website](#), patent, patent, patent.
- Developed custom TensorFlow op for aligning 3D point clouds during training.

GOOGLE BRAIN | RESEARCH INTERN

May 2016 - Aug 2016 | Mountain View, CA

- Geometry-based next frame prediction from monocular video.
- IEEE Intelligent Vehicles Symposium 2017 [Paper](#), patent, patent.

GOOGLE | SOFTWARE ENGINEERING INTERN

Jun 2015 - Aug 2015 | Mountain View, CA

- Created a sparse-feature deep learning model for Google's ad publishing platform using DistBelief. Improved performance by 1.38% over existing model.
- Added support for Capacitor files to DistBelief (now TensorFlow).

TEAMUP | START-UP LEAD DEVELOPER

Jul 2009 - Dec 2009 | London, UK

- Created a Django web app for managing fitness and sports businesses.
- Led the project from inception to beta release [Website](#).